

## EAST Search History

## EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1	"20060272672".pn.	US-PGPUB	OR	ON	2010/05/04 11:44
L3	4	("20020097285"   "20040160155"   "4597665"   "6444037").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/04 11:45
L4	2	("20020097285"   "20040160155").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/04 11:46
L5	4	("02054115" "1220038" "9957607" "9902969").PN.	FFRS; EPO; JPO	OR	ON	2010/05/04 11:46
L6	6	L4 L5	US-PGPUB; USPAT; USOCR; FFRS; EPO; JPO; DERWENT	OR	ON	2010/05/04 11:46
L7	1234	((semiconductor\$2 or substrate\$2 or wafer\$2 or workpiece\$2 optic\$2) same (treat\$4 or clean\$4)) and ((collect\$4 gather\$3) same (particle\$1 particulate\$1 contamina\$3) same (obstacle\$1 recess\$2 slot\$1 groove\$2 hole\$1))	US-PGPUB; USPAT	OR	ON	2010/05/04 11:46
L8	70	((semiconductor or substrate or wafer or workpiece optic) same (treat treatment or clean cleaning)) and ((collect collection gather gathering) same (particle particulate contaminant contaminated) same (obstacle recess slot groove hole))	USOCR	OR	ON	2010/05/04 11:46
L9	122	(L7 L8) and ("134" "156").clas.	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/04 11:46
L10	19	L9 and (134/1,19,21 156/345.27).cds.	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/04 11:46
L11	107	((semiconductor\$2 or substrate\$2 or wafer\$2 or workpiece\$2 optic\$2) and (treat\$4 or clean\$4)) and ((collect\$4 gather\$3) and (particle\$1 particulate\$1 contamina\$3) and (obstacle\$1 recess\$2 slot\$1 groove\$2 hole\$1))	FFRS; EPO; JPO; DERWENT	OR	ON	2010/05/04 11:46
L12	37	L11 and ((semiconductor\$2 or substrate\$2 or wafer\$2 or workpiece\$2 optic\$2) same (treat\$4 or clean\$4)) and ((collect\$4 gather\$3) same (particle\$1 particulate\$1 contamina\$3) same (obstacle\$1 recess\$2 slot\$1 groove\$2 hole\$1))	FFRS; EPO; JPO; DERWENT	OR	ON	2010/05/04 11:46
L13	62	L6 L10 L12	US-PGPUB; USPAT; USOCR; FFRS; EPO; JPO; DERWENT	OR	ON	2010/05/04 11:46
L14	4	"2001037309".pn.	FFRS; EPO; JPO; DERWENT	OR	ON	2010/05/04 11:49

L15	0	13 and 14	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2010/05/04 11:50
L16	66	13 14	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2010/05/04 11:50
L17	0	14 and (slot groove aperture channel niche slit socket space canal indentation crease ditch gutter hollow notch rut trench valley)	FPRS; EPO; JPO; DERWENT	OR	ON	2010/05/04 11:53
L18	33	16 and (slot groove aperture channel niche slit socket space canal indentation crease ditch gutter hollow notch rut trench valley)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2010/05/04 12:33
L20	29	18 and (slot groove aperture channel niche slit socket space canal indentation crease ditch gutter hollow notch rut trench valley) same (particle\$1 particulate\$1 contamina\$3 debris soil dirt residue)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2010/05/04 12:35
L21	33	18 and (slot groove aperture channel niche slit socket space canal indentation crease ditch gutter hollow notch rut trench valley) and (particle\$1 particulate\$1 contamina\$3 debris soil dirt residue)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2010/05/04 12:38
L22	12	("2004/0160155").URPN.	USPAT	OR	ON	2010/05/04 12:45
L23	1	("2002/0097285").URPN.	USPAT	OR	ON	2010/05/04 12:45
L24	30	("3934060"   "4002512"   "4565601"   "4567938"   "4695700"   "4817558"   "4872947"   "4951601"   "5032202"   "5368646"   "5510297"   "5516367"   "5545289"   "5549802"   "5551982"   "5558717"   "5605637"   "5891350"   "5935334").PN. OR ("6444037").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/04 12:45
L25	31	("3663824"   "4243891"   "4360275"   "4378159"   "4380032").PN. OR ("4597665"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/04 12:45
L26	74	22 23 24 25	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/04 12:45
L27	36	26 and (slot groove aperture channel niche slit socket space canal indentation crease ditch gutter hollow notch rut trench valley) and (particle\$1 particulate\$1 contamina\$3 debris soil dirt residue)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2010/05/04 12:45
L28	15	27 and (slot groove aperture channel niche slit socket space canal indentation crease ditch gutter hollow notch rut trench valley) same (particle\$1 particulate\$1 contamina\$3 debris soil dirt residue)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2010/05/04 12:47

L29	5	((134/1,19,21,104.2,105,201,902 156/345.27). ccls. and ((semiconductor\$2 or substrate\$2 or wafer\$2 or workpiece\$2 optic\$2) and (treat\$4 or clean\$4 remov\$3 reduc\$3) and (collect\$4 gather\$3 accumul\$3 amass\$3) and (particle\$1 particulate\$1 contaminat\$3 soil debris residue dirt) and (obstacle\$1 recess\$2 slot\$1 groove\$2 hole\$1) and (temperature heat\$3 cool\$3 pressure pressuriz\$5 vent\$3 exhaust \$3)).clm.	US-PGPUB	OR	ON	2010/05/04 12:56
S1	1	"2060272672".pn.	US-PGPUB	OR	ON	2008/06/04 11:39
S2	0	S1 and (portion\$1 with position\$1)	US-PGPUB	OR	ON	2008/06/04 11:42
S3	0	S1 and (portion\$1 with obstacle\$1)	US-PGPUB	OR	ON	2008/06/04 11:42
S4	0	S1 and (position\$1 with obstacle\$1)	US-PGPUB	OR	ON	2008/06/04 11:42
S5	0	S1 and (position\$1 with (first second))	US-PGPUB	OR	ON	2008/06/04 11:43
S6	0	WO0137309.pn.	FPRS; EPO; JPO; DERWENT	OR	ON	2008/06/04 12:13
S7	0	"0137309".pn.	FPRS; EPO; JPO; DERWENT	OR	ON	2008/06/04 12:13
S8	0	"01/37309".pn.	FPRS; EPO; JPO; DERWENT	OR	ON	2008/06/04 12:13
S9	0	"wo01/37309".pn.	FPRS; EPO; JPO; DERWENT	OR	ON	2008/06/04 12:13
S10	1	"200137309".pn.	FPRS; EPO; JPO; DERWENT	OR	ON	2008/06/04 12:14
S11	0	"wo 0137309".pn.	FPRS; EPO; JPO; DERWENT	OR	ON	2008/06/04 12:14
S12	0	"partio.in"	FPRS; EPO; JPO; DERWENT	OR	ON	2008/06/04 12:15
S13	225	partio.in.	FPRS; EPO; JPO; DERWENT	OR	ON	2008/06/04 12:15
S14	46	S13 and plasma	FPRS; EPO; JPO; DERWENT	OR	ON	2008/06/04 12:16
S15	3	S14 and nest\$2	FPRS; EPO; JPO; DERWENT	OR	ON	2008/06/04 12:16
S16	611	cymer.as.	FPRS; EPO; JPO; DERWENT	OR	ON	2008/06/04 12:19
S17	74	S16 and plasma	FPRS; EPO; JPO; DERWENT	OR	ON	2008/06/04 12:20
S18	6	S17 and (plasma with focus with light)	FPRS; EPO; JPO; DERWENT	OR	ON	2008/06/04 12:20
S19	0	WO/2001/037309	FPRS; EPO; JPO; DERWENT	OR	ON	2008/06/04 12:24
S20	0	WO/2001/037309.pn.	FPRS; EPO; JPO; DERWENT	OR	ON	2008/06/04 12:24
S21	0	WO2001037309.pn.	FPRS; EPO; JPO; DERWENT	OR	ON	2008/06/04 12:24
S22	4	"2001037309".pn.	FPRS; EPO; JPO; DERWENT	OR	ON	2008/06/04 12:24
S23	0	WO2000US29750.pn.	FPRS; EPO; JPO; DERWENT	OR	ON	2008/06/04 12:26

S24	0	2000US29750.pn.	FFRS; EPO; JPO; DERWENT	OR	ON	2008/06/04 12:26
S25	976	cymer.as.	US-PGPUB; USPAT; USOCR; FFRS; EPO; JPO; DERWENT	OR	ON	2008/06/04 12:30
S26	333	S25 and partlo.in.	US-PGPUB; USPAT; USOCR; FFRS; EPO; JPO; DERWENT	OR	ON	2008/06/04 12:30
S27	100	S26 and plasma	US-PGPUB; USPAT; USOCR; FFRS; EPO; JPO; DERWENT	OR	ON	2008/06/04 12:30
S28	47	S27 and focus and light and pulse	US-PGPUB; USPAT; USOCR; FFRS; EPO; JPO; DERWENT	OR	ON	2008/06/04 12:31
S29	1	S1 and obstacle	US-PGPUB	OR	ON	2008/06/04 12:33
S30	0	wo0137309.pn.	US-PGPUB; USPAT; USOCR; FFRS; EPO; JPO; DERWENT	OR	ON	2008/08/28 21:21
S31	0	wo0137309	US-PGPUB; USPAT; USOCR; FFRS; EPO; JPO; DERWENT	OR	ON	2008/08/28 21:21
S32	2	"0137309".pn.	US-PGPUB; USPAT; USOCR; FFRS; EPO; JPO; DERWENT	OR	ON	2008/08/28 21:22
S33	3	(partlo and fomenkov and oliver and ness and bix).in.	FFRS; EPO; JPO; DERWENT	OR	ON	2008/08/28 21:26
S34	0	S33 and collect\$5	FFRS; EPO; JPO; DERWENT	OR	ON	2008/08/28 21:31
S35	0	S33 and obtacle	FFRS; EPO; JPO; DERWENT	OR	ON	2008/08/28 21:32
S36	0	S33 and obstacle	FFRS; EPO; JPO; DERWENT	OR	ON	2008/08/28 21:32
S37	2	("20020097285"   "20040160155").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2008/08/28 21:47
S38	4	("02054115" "1220038" "9957607" "9902969").PN.	FFRS; EPO; JPO	OR	ON	2008/08/28 21:49
S39	6	S37 S38	US-PGPUB; USPAT; USOCR; FFRS; EPO; JPO; DERWENT	OR	ON	2008/08/28 21:50

S40	1071	((semiconductor\$2 or substrate\$2 or wafer\$2 or workpiece\$2 optic\$2) same (treat\$4 or clean\$4)) and ((collect\$4 gather\$3) same (particle\$1 particulate\$1 contamina\$3) same (obstacle\$1 recess\$2 slot\$1 groove\$2 hole\$1))	US-PGPUB; USPAT	OR	ON	2008/08/28 21:56
S41	70	((semiconductor or substrate or wafer or workpiece optic) same (treat treatment or clean cleaning)) and ((collect collection gather gathering) same (particle particulate contaminant contaminated) same (obstacle recess slot groove hole))	USOCR	OR	ON	2008/08/28 21:58
S42	103	(S40 S41) and ("134" "156").clas.	US-PGPUB; USPAT; USOCR	OR	ON	2008/08/28 21:58
S43	14	S42 and (134/1,19,21 156/345,27).ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2008/08/28 22:01
S44	83	((semiconductor\$2 or substrate\$2 or wafer\$2 or workpiece\$2 optic\$2) and (treat\$4 or clean\$4)) and ((collect\$4 gather\$3) and (particle\$1 particulate\$1 contamina\$3) and (obstacle\$1 recess\$2 slot\$1 groove\$2 hole\$1))	FPRS; EPO; JPO; DERWENT	OR	ON	2008/08/28 22:01
S45	25	S44 and ((semiconductor\$2 or substrate\$2 or wafer\$2 or workpiece\$2 optic\$2) same (treat \$4 or clean\$4)) and ((collect\$4 gather\$3) same (particle\$1 particulate\$1 contamina\$3) same (obstacle\$1 recess\$2 slot\$1 groove\$2 hole\$1))	FPRS; EPO; JPO; DERWENT	OR	ON	2008/08/28 22:02
S46	45	S39 S43 S45	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2008/08/28 22:03
S47	1	"20060272672".pn.	US-PGPUB	OR	ON	2008/08/28 22:19
S48	1	S47 and recess\$2	US-PGPUB	OR	ON	2008/08/28 22:19
S49	1	S47 and recess\$2 same surface\$1	US-PGPUB	OR	ON	2008/08/28 22:19
S50	25	S46 and ((obstacle\$1 recess\$2 slot\$1 groove \$2 hole\$1) same surface\$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2008/08/28 22:22
S51	1	S47 and ((obstacle\$1 recess\$2 slot\$1 groove \$2 hole\$1) with surface\$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2008/08/28 22:31
S52	4432	(semiconductor\$2 or substrate\$2 or wafer\$2 or workpiece\$2 optic\$2) with surface\$1 with (slot\$1 groove\$2 hole\$1) with (photochemical \$2 laser\$2)	US-PGPUB; USPAT	OR	ON	2008/08/28 22:38
S53	3	S52 and (slot\$1 groove\$2 hole\$1) with particle \$2 with collect\$4	US-PGPUB; USPAT	OR	ON	2008/08/28 22:39
S54	0	S52 and (slot\$1 groove\$2 hole\$1) with contaminant\$2 with collect\$4	US-PGPUB; USPAT	OR	ON	2008/08/28 22:42
S55	0	S52 and (slot\$1 groove\$2 hole\$1) same contaminant\$2 same collect\$4	US-PGPUB; USPAT	OR	ON	2008/08/28 22:43

S56	6	S52 and contaminant\$2 same collect\$4	US-PGPUB; USPAT	OR	ON	2008/08/28 22:44
S57	104	(semiconductor\$2 or substrate\$2 or wafer\$2 or workpiece\$2 optic\$2) with surface\$1 with (slot\$1 groove\$2 hole\$1) and (contaminant\$2 with collect\$4)	US-PGPUB; USPAT	OR	ON	2008/08/28 22:45
S58	33	S57 and (photochemical\$2 laser\$2)	US-PGPUB; USPAT	OR	ON	2008/08/28 22:46
S59	1	"4597665".pn.	US-PGPUB; USPAT	OR	ON	2008/08/29 10:42
S60	1	S59 and particle\$1	US-PGPUB; USPAT	OR	ON	2008/08/29 10:43
S61	1	"20060272672".pn.	US-PGPUB	OR	ON	2008/08/29 10:49
S62	2	("20020097285"   "20040160155").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/02 14:37
S63	2	S62 and radia\$5	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/02 14:37
S64	1	"6566667".pn.	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/02 14:42
S65	56	"6566667"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2008/09/02 14:42
S66	1	"6566667"	FPRS; EPO; JPO; DERWENT	OR	ON	2008/09/02 14:42
S67	0	S66 and radia\$5	FPRS; EPO; JPO; DERWENT	OR	ON	2008/09/02 14:43
S68	1	"20060272672".pn.	US-PGPUB	OR	ON	2009/05/20 11:49
S69	3	("20040244102"   "6172981"   "6996409").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/05/20 11:49
S70	4	"2001037309".pn.	FPRS; EPO; JPO; DERWENT	OR	ON	2009/05/20 11:54
S71	1	"20060272672".pn.	US-PGPUB	OR	ON	2009/05/20 14:50
S72	3	("20040244102"   "6172981"   "6996409").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/05/20 14:50
S73	4	"2001037309".pn.	FPRS; EPO; JPO; DERWENT	OR	ON	2009/05/20 14:50
S74	0	S73 and optic\$2	FPRS; EPO; JPO; DERWENT	OR	ON	2009/05/20 14:51
S75	1	S71 and optic\$2	US-PGPUB; USPAT; USOCR	OR	ON	2009/05/20 14:51
S76	0	S73 and (monochromator\$1 mirror\$1)	FPRS; EPO; JPO; DERWENT	OR	ON	2009/05/20 14:54
S77	0	S73 and radiat\$3	FPRS; EPO; JPO; DERWENT	OR	ON	2009/05/20 14:57
S78	1	S71 and radiat\$3	US-PGPUB; USPAT; USOCR	OR	ON	2009/05/20 14:58
S79	0	S73 and (ultraviolet uv x-ray\$1 xray\$1 (x near3 ray\$1))	FPRS; EPO; JPO; DERWENT	OR	ON	2009/05/20 15:01
S80	1	"6566667".pn.	US-PGPUB; USPAT; USOCR	OR	ON	2009/05/20 15:08

S81	1	S80 and radiat\$3	US-PGPUB; USPAT; USOCR	OR	ON	2009/05/20 15:09
S82	1	S80 and (radiat\$3 ultraviolet uv x-ray\$1 xray \$1 (x near3 ray\$1))	US-PGPUB; USPAT; USOCR	OR	ON	2009/05/20 15:09
S83	1	S80 and (optic\$2 monochromator\$1 mirror\$1)	US-PGPUB; USPAT; USOCR	OR	ON	2009/05/20 15:11
S84	1	S80 and pressur\$5	US-PGPUB; USPAT; USOCR	OR	ON	2009/05/20 15:12
S85	1	S80 and tungsten	US-PGPUB; USPAT; USOCR	OR	ON	2009/05/20 15:17
S86	4	"2001037309".pn.	FPFS; EPO; JPO; DERWENT	OR	ON	2009/05/20 23:55
S87	1	"4597665".PN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/05/20 23:55
S88	5	S86 S87	US-PGPUB; USPAT; USOCR; FPFS; EPO; JPO; DERWENT	OR	ON	2009/05/20 23:56
S89	0	S88 and (cvd deposit\$4)	US-PGPUB; USPAT; USOCR; FPFS; EPO; JPO; DERWENT	OR	ON	2009/05/20 23:56
S90	0	S88 and (\$3cvd vpd)	US-PGPUB; USPAT; USOCR; FPFS; EPO; JPO; DERWENT	OR	ON	2009/05/20 23:58
S91	1	"6566667".pn.	FPFS; EPO; JPO; DERWENT	OR	ON	2009/05/20 23:59
S92	0	S91 and (cvd deposit\$4)	US-PGPUB; USPAT; USOCR; FPFS; EPO; JPO; DERWENT	OR	ON	2009/05/21 00:00
S93	0	S91 and (\$3cvd vpd)	US-PGPUB; USPAT; USOCR; FPFS; EPO; JPO; DERWENT	OR	ON	2009/05/21 00:00
S94	1	"20060272672".pn.	US-PGPUB	OR	ON	2009/05/21 00:21
S95	1	S94 and chemical	US-PGPUB	OR	ON	2009/05/21 00:21
S96	0	S88 and (chemical react\$4)	US-PGPUB; USPAT; USOCR; FPFS; EPO; JPO; DERWENT	OR	ON	2009/05/21 00:24
S97	2	"6566667".pn.	US-PGPUB; USPAT; USOCR; FPFS; EPO; JPO; DERWENT	OR	ON	2009/05/21 00:26

S98	1	S97 and (chemical react\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/05/21 00:26
S99	0	S87 and (chemical react\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/05/21 00:30
S100	1	S94 and coating\$1	US-PGPUB	OR	ON	2009/05/21 00:36
S101	1	S88 and (coat\$3 plat\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/05/21 00:40
S102	1	S97 and (coat\$3 plat\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/05/21 00:40
S103	1	"20060272672".pn.	US-PGPUB	OR	ON	2009/12/19 03:18
S104	3	("20020097285"   "20040160155"   "4597665").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/19 03:19
S105	0	S103 and remov\$3 same contamina\$3	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/19 03:42
S106	1	S103 and react\$3 same partner\$3	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/19 03:43
S107	1	S104 and react\$3	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/19 03:55
S108	1	"20060272672".pn.	US-PGPUB	OR	ON	2009/12/20 17:53
S109	1	"20060272672".pn.	US-PGPUB	OR	ON	2009/12/20 17:55
S110	1	S109 and react\$3 same partner\$3	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/20 17:55
S111	3	("20020097285"   "20040160155"   "4597665").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/20 17:55
S112	1	S111 and react\$3	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/20 17:55
S113	1	"20060272672".pn.	US-PGPUB	OR	ON	2009/12/20 19:23
S114	3	("20020097285"   "20040160155"   "4597665").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/20 19:37
S115	2	S114 and particle\$1	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/20 19:37
S116	3	("20020097285"   "20040160155"   "4597665").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/20 21:08
S117	1	S116 and react\$3	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/20 21:08
S118	4	"2001037309".pn.	FPRS; EPO; JPO; DERWENT	OR	ON	2009/12/20 21:23
S119	0	S118 and react\$4	FPRS; EPO; JPO; DERWENT	OR	ON	2009/12/20 21:23



S120	2	("20020097285"   "20040160155").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/20 21:24
S121	4	("02054115" "1220038" "9957607" "9902969").PN.	FPFS; EPO; JPO	OR	ON	2009/12/20 21:24
S122	6	S120 S121	US-PGPUB; USPAT; USOCR; FPFS; EPO; JPO; DERWENT	OR	ON	2009/12/20 21:24
S123	1192	((semiconductor\$2 or substrate\$2 or wafer\$2 or workpiece\$2 optic\$2) same (treat\$4 or clean\$4)) and ((collect\$4 gather\$3) same (particle\$1 particulate\$1 contamina\$3) same (obstacle\$1 recess\$2 slot\$1 groove\$2 hole \$1))	US-PGPUB; USPAT	OR	ON	2009/12/20 21:24
S124	70	((semiconductor or substrate or wafer or workpiece optic) same (treat treatment or clean cleaning)) and ((collect collection gather gathering) same (particle particulate contaminant contaminated) same (obstacle recess slot groove hole))	USOCR	OR	ON	2009/12/20 21:24
S125	119	(S123 S124) and ("134" "156").clas.	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/20 21:24
S126	19	S125 and (134/1,19,21 156/345.27).ccis.	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/20 21:24
S127	102	((semiconductor\$2 or substrate\$2 or wafer\$2 or workpiece\$2 optic\$2) and (treat\$4 or clean \$4)) and ((collect\$4 gather\$3) and (particle\$1 particulate\$1 contamina\$3) and (obstacle\$1 recess\$2 slot\$1 groove\$2 hole\$1))	FPFS; EPO; JPO; DERWENT	OR	ON	2009/12/20 21:24
S128	32	S127 and ((semiconductor\$2 or substrate\$2 or wafer\$2 or workpiece\$2 optic\$2) same (treat\$4 or clean\$4)) and ((collect\$4 gather \$3) same (particle\$1 particulate\$1 contamina \$3) same (obstacle\$1 recess\$2 slot\$1 groove \$2 hole\$1))	FPFS; EPO; JPO; DERWENT	OR	ON	2009/12/20 21:24
S129	57	S122 S126 S128	US-PGPUB; USPAT; USOCR; FPFS; EPO; JPO; DERWENT	OR	ON	2009/12/20 21:24
S130	18	S129 and react\$4	US-PGPUB; USPAT; USOCR; FPFS; EPO; JPO; DERWENT	OR	ON	2009/12/20 21:25
S131	0	"10409254".PN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/20 21:27
S132	1	"6586757".PN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/20 21:30
S133	0	S132 and react\$4	US-PGPUB; USPAT; USOCR; FPFS; EPO; JPO; DERWENT	OR	ON	2009/12/20 21:30

S134	12	S124 and react\$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/12/20 21:33
S135	428	((semiconductor or substrate or wafer or workpiece optic) same (treat treatment or clean cleaning)) and ((collect collection gather gathering) same (particle particulate contaminant contaminated) same (obstacle recess slot groove hole))	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/20 21:33
S136	204	S135 and react\$4	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/20 21:33
S137	61	S136 and (react\$4 same (pump\$3 exhaust\$3 vent\$3 suc\$4 blow\$3))	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/20 21:36
S138	356	S135 and (tungsten " W " fluorine\$2 " F " "F.sub.2" "NF.sub.3" "WF.sub.6" halogen chlorine\$2 halide)	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/20 21:44
S139	176	S138 and react\$4	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/20 21:45
S140	51	S139 and (react\$4 same (pump\$3 exhaust\$3 vent\$3 suc\$4 blow\$3))	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/20 21:45
S141	9	S140 and optic\$2	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/20 21:48
S142	11378	optic\$2 and ((tungsten " W " fluorine\$2 " F " "F.sub.2" "NF.sub.3" "WF.sub.6" halogen chlorine\$2 halide) same react\$4 same (pump\$3 exhaust\$3 vent\$3 suc\$4 blow\$3))	US-PGPUB; USPAT	OR	ON	2009/12/20 21:55
S143	1731	S142 and optical and ((tungsten " W " fluorine\$2 " F " "F.sub.2" "NF.sub.3" "WF.sub.6" halogen chlorine\$2 halide) with react\$4 with (pump\$3 exhaust\$3 vent\$3 suc\$4 blow\$3))	US-PGPUB; USPAT	OR	ON	2009/12/20 21:56
S144	1141	S143 and vacuum	US-PGPUB; USPAT	OR	ON	2009/12/20 21:58
S145	107	S144 and react\$4 with contaminant\$3	US-PGPUB; USPAT	OR	ON	2009/12/20 21:59
S146	44	S144 and react\$4 with contaminant\$3	US-PGPUB	OR	ON	2009/12/20 21:59
S147	1	"6444037".pn.	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/20 22:04
S148	1	S147 and fluorine same residue same pumped	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/20 22:06

5/4/2010 1:01:59 PM

C:\Documents and Settings\egolightly\My Documents\EAST Workspaces\ App 10566963.wsp